

Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 11-13, 15-19, 21-27, and 31 are pending in the application, with claims 11, 17, 18, and 21 being the independent claims. Claims 1-10, 14, 20, and 28-30 were previously cancelled without prejudice to or disclaimer of the subject matter therein. Claims 11, 17, 18, 21, and 31 are sought to be amended. Applicants reserve the right to prosecute similar or broader claims, with respect to the cancelled and amended claims, in the future. Support for amendment to claim 21 can be found, at least at, for example, at pages 9-16 and 26 and FIGs. 1-4 of the originally filed specification. These amendments should be entered after final because they merely clarify implicit features, do not require further search or consideration by the Examiner, and they place the claims in condition for allowance and/or reduce the issues for appeal.

These changes are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Summary of Examiner Interview

The Examiner is thanked for his time for telephone conversations on November 15 and 19, 2010, during which discussions with Applicants' representative, Randall K. Baldwin, Applicants' attorney requested clarification regarding the objection to claim 18

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and the rejection of claims 11-13, 15-19, 21, 23-27 and 31 under 35 U.S.C. § 112, first paragraph.

During the conversation on November 15, 2010, the Examiner clarified that amendments to claim 18 submitted with the Amendment and Reply filed October 6, 2009 did not underline an added word and Applicants' attorney agreed. This understanding is reflected in the current status of claim 18 indicated above.

During the conversation on November 19, 2010, Applicants' attorney proposed an amendment to traverse the rejection of claim 21 under 35 U.S.C. § 101 and the Examiner agreed that the amendment would obviate the rejection. During the conversation on November 19, 2010, Applicants' attorney and the Examiner additionally discussed portions of the specification supporting the features recited in 11-13, 15-19, 21, 23-27 and 31. The Examiner and Applicants' attorney also generally discussed proposed amendments for claims 11, 17, 18, and 21, to obviate the rejection of these claims under 35 U.S.C. § 103. No agreement was reached on specific claim language. The substance of the discussions is included in the present remarks.

Claim Objection

Claim 18 was rejected for various informalities. Applicants respectfully traverse this objection. On page 4 of the Office Action, the Examiner states "the Applicant amended a word "independent" in the claim however the work "independent" is not underlined." As generally discussed during the aforementioned telephone conversations, Applicants have indicated the previously submitted amendment to claim 18 herein with

additional amendments as discussed below. Therefore, Applicants respectfully request that the objection be reconsidered and withdrawn.

Rejection under 35 U.S.C. § 101

Claim 21 was rejected under 35 U.S.C. § 101 for allegedly being directed to non-statutory subject matter. Applicants respectfully traverse this rejection. In particular, the Examiner asserts that the recited "tangible computer-readable medium" can be "[b]roadly interpreted" to be "any means that include propagate [sic - propagation] and transmission signals, which are non-eligible subject matter under 35 U.S.C. 101." (Office Action, page 5).

During the aforementioned telephone conversation on November 19, 2010 and on page 5 of the Office Action, the Examiner suggested amending claim 21 such that it recites a "non-transitory" computer readable medium. Although Applicants disagree with the rejection, merely in order to expedite prosecution, and without acquiescing to the propriety of the rejection, claim 21 is amended herein to include the suggested language. Applicants note that "a non-transitory computer readable medium," as recited by amended claim 21, comprises all computer readable media, with the sole exception being a transitory, propagating signal.

Support for the recited "non-transitory computer-readable medium" is found in the specification, at least at, for example, pages 10 and 11 and FIGs. 1 and 2 and originally filed claim 9. By way of example and not limitation, the specification describes exemplary embodiments comprising storage means MEM 1 and MEM 2 shown in FIGs. 1 and 2 and described, e.g., on pages 10 and 11. Applicants submit that

this portion of the originally filed specification supports a non-transitory computer-readable medium because information stored in MEM 1 and MEM 1 are read by or accessed a host computer HC.

Applicants understand the term “non-transitory” to merely exclude “computer readable medium” from reading on non-tangible media such as signals and carrier waves, and that no further restriction of the claim scope is introduced through these amendments.

Accordingly, at least based on the amendments above, Applicants respectfully request that the Examiner reconsider and withdraw this rejection of claim 21 under 35 U.S.C. § 101.

Objection to the Specification

At page 5 of the Office Action, the Examiner objected to the specification as allegedly failing to provide proper antecedent basis for the “tangible computer-readable medium” recited in claim 21. Applicants respectfully traverse this objection.

As discussed during the telephone conversation on November 19, 2010 and suggested by the Examiner on page 5 of the Office Action, without acquiescing to the propriety of the objection, and merely to expedite prosecution, Applicants have amended claim 21 to recite “a non-transitory computer readable medium.” Support for amendment to claim 21 can be found, for example, at pages 10 and 11 and FIGs. 1 and 2 of the originally filed specification.

Based on the amendments above, Applicants respectfully request the Examiner reconsider and withdraw the objection to the specification.

Rejections under 35 U.S.C. § 112

35 U.S.C. 112, First Paragraph

Claims 11-13, 15-19, 21, 23-27 and 31 were rejected under 35 U.S.C. § 112., first paragraph, for allegedly failing to comply with the written description requirement. Applicants respectfully traverse this rejection for the reasons stated below.

With regards to claims 11 and 21, the Examiner alleges, which Applicants do not concede, that the limitations "authenticating the user for the transaction before completing the transaction if the price is below a threshold amount, which corresponds to a second [sic - first] authentication level" and "authenticating the user for the transaction after completing the transaction if the price is above a threshold amount, which corresponds to a second authentication level" are "not defined in the specification" (Office Action, page 6).

Claims 11, 17, 18, and 21

Without acquiescing to the propriety of the rejection, Applicants have amended claims 11, 17, 18, and 21 to accommodate the rejection of the Examiner.

In particular, Applicants have amended the claims to further clarify the recited threshold amounts and authentication levels.

For example, claims 11 and 21 as amended herein recite, using respective language, *inter alia*:

authenticating the user for the transaction before completing the transaction *if the price is below a first threshold amount, which corresponds to a first authentication level*; and
authenticating the user for the transaction after completing the transaction *if the price is above a second threshold amount, which*

corresponds to a second authentication level, wherein the first threshold amount is less than the second threshold amount.

Further, for example, claim 17 as amended herein recites, among other features:

wherein authentication of the user is performed for the transaction before completing the transaction ***if the price is below a first threshold amount, which corresponds to a first authentication level,***

wherein authentication of the user is performed for the transaction after completing the transaction ***if the price is above a second threshold amount, which corresponds to a second authentication level, wherein the first threshold amount is less than the second threshold amount.***

Also, for example, claim 18 as amended herein recites, *inter alia*:

wherein the request for information is received before the transaction has completed when ***a first one of a plurality of independent authentication levels is used for the transaction if the numeric value is below a first threshold amount,*** and

wherein the request for information is received after the transaction has completed when ***a second one of the plurality of independent authentication levels is used for the transaction if the numeric value is above a second threshold amount, wherein the first threshold amount is less than the second threshold amount.***

Support for the above-noted features is found at least at, for example, pages 14-17 of the specification. By way of example and not limitation, the specification describes an exemplary embodiment wherein "when the price of the commodity is equal to or less than the first predetermined value, the authentication level 1 is adopted and it is unconditionally authenticated . . . [w]hen the price of the commodity is more than the first predetermined value and is equal to or less than the second predetermined value, the authentication level 2 is adopted," and "[w]hen the price of the commodity is more than the second predetermined value, authentication level 3 is adopted." (Applicants' specification, pages 16-17). An exemplary embodiment of authentication levels and

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their relationship to a numeric value (e.g., the price) associated with a transaction is provided on page 16 in Table 2 of the Specification, which is reproduced below:

Table 2. Examples of the authentication levels

Authentication Level 1
In case: the price of the commodity is equal to or less than a first predetermined value. The first predetermined value is, for example, ¥5,000.
Authentication Level 2
In case: the price of the commodity is more than the first predetermined value and is equal to or less than a second predetermined value. The second predetermined value is, for example, ¥10,000.
Authentication Level 3
In case: the price of the commodity is more than the second predetermined value.

Thus, Applicants respectfully submit that the above-noted features of amended claims 11, 17, 18, and 21 directed to first and second authentication levels and first and second threshold amounts are described in the specification.

Based on the above remarks and in view of the present amendments to claims 11, 17, 18, and 21, Applicants submit that claims 11, 17, 18, and 21 are now in compliance with 35 U.S.C. § 112, first paragraph.

Additionally, at least based on their respective dependencies to claims 11, 17, 18 and 21, Applicants respectfully request the Examiner reconsider and withdraw the rejection of claims 12, 13, 15, 16, 19, 23-27 and 31 under 35 U.S.C. § 112, first paragraph.

35 U.S.C. 112, Second Paragraph Claim 31

At page 8 of the Office Action, claim 31 was rejected under 35 U.S.C. § 112, second paragraph for allegedly being indefinite. In particular, the Examiner states that “[c]laim 31 recites the limitation ‘the communication[s] device’ in line 8” and “[t]here is

insufficient antecedent basis for this limitation in the claim.” Applicants respectfully traverse this rejection.

Without acquiescing to the propriety of the rejection, Applicants have amended claim 31 for other reasons and to expedite prosecution. Claim 31 no longer recites “the communications device.” Claim 31 depends from claim 11, which recites “a service device.” Applicants have amended claim 31 to recite “the service device” of base claim 11. Based on the amendments above, Applicants respectfully request the Examiner reconsider and withdraw the rejection of claim 31 under 35 U.S.C. § 112, second paragraph.

Rejections under 35 U.S.C. § 103

Claims 11, 17, 21, and 31

At page 9 of the Office Action, claims 11, 17, 21 and 31 were rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over JP Publ. No. 2000-76336 to Taro (“Taro”) in view of U.S. Pub. No. 2001/0001877 to French (“French”), and further in view of U.S. Pat. No. 5,914,472 to Foladare (“Foladare”). Applicants respectfully traverse this rejection for the reasons stated below.

As generally discussed during the telephone conversation on November 19, 2010, without acquiescing to the propriety of the rejection, Applicants have amended claims 11, 17, and 21 for other reasons and to expedite prosecution. Claims 11, 17, and 21 recite features that distinguish over the applied references.

For example, claims 11 and 21 as amended herein recite, using respective language, among other features:

authenticating the user for the transaction before completing the transaction ***if the price is below a first threshold amount, which corresponds to a first authentication level***; and
authenticating the user for the transaction after completing the transaction ***if the price is above a second threshold amount, which corresponds to a second authentication level, wherein the first threshold amount is less than the second threshold amount.***

Claim 17 as amended herein recites similar distinguishing features.

The applied references, alone or in the allegedly obvious combination, do not teach or suggest at least the above quoted distinguishing features of claims 11, 17, and 21.

The Examiner acknowledges that "Tara [sic - Taro] does not explicitly disclose (a) identifying a prices of a product or server to be purchased by the users; receiving a first request, from a service device, for information regarding authentication of a user and identifying a price of a product or service to be purchased by the user, wherein the first request is in response to a transaction at the service device; (b) authenticating the user for the transaction before completing the transaction if the price is below a threshold amount, which corresponds to a first authentication level; and (c) authenticating the user for the transaction after completing the transaction if the price is above a _threshold amount, which corresponds to a second authentication level." (Office Action, pages 9-10).

However, the Examiner asserts, which Applicants do not acquiesce to, that French cures the acknowledged deficiencies of Taro. (Office Action, page 10). In particular, the Examiner relies on paragraphs 19-22, 24, and 25 of French to cure the above-noted deficiencies of Taro.

French discloses that "lower risk transactions such as relatively small purchases may not require an extensive authentication process . . . [o]n the other hand, more sensitive or greater risk transactions such as large purchases or sensitive data access may require a more thorough authentication process and a greater level of security." (French, paragraph [0021]). However, French fails to teach or suggest the timing of authentication by "authenticating the user for the transaction before completing the transaction if the price is below a first threshold amount, which corresponds to a first authentication level; and authenticating the user for the transaction after completing the transaction if the price is above a second threshold amount," as recited, using respective similar language, in claims 11, 17, and 21.

French additionally discloses that an "object of the invention is to provide an authentication system and method that perform a first level of authentication based on a first type of information and, based on the results of the first level of authentication, determine whether to perform at least a second level of authentication *using another type of information.*" (French, paragraph [0010]) (emphasis added). In contrast, claims 11, 17, and 21 recite, using respective similar language, "authenticating the user for the transaction before completing the transaction if the price is below a first threshold amount, which corresponds to a first authentication level; and authenticating the user for the transaction after completing the transaction if the price is above a second threshold amount, which corresponds to a second authentication level, wherein the first threshold amount is less than the second threshold amount." In contrast, French's authentication system performs a first authentication based on a first type of information and then

conditionally performing a second level of authentication using another, different type of information. *Id.*

French further discloses that:

[t]he user is initially requested to provide a first type of identification information. **The first type of information is preferably wallet-type information**, that is, information such as name, address, driver's license or other information that may be commonly carried on the person. This information is transmitted to the authentication server which carries out **a first level authentication process on that information**.

That first level authentication process compares the degree of match between the user-supplied first type of information and known data about the user from other sources. At the completion of this first level authentication process, the authentication server may allow the requested access, allow the requested access with restriction, refuse access or proceed to another level of authentication.

Preferably, **the second and any additional levels of authentication request a second, non-wallet type of information from the user. The second type of information is preferably based on comparatively private information that only the user would know.** For example, the second type of information may include mortgage loan or other information obtained from a credit report or another source. Such information is typically not carried with a person, and therefore the chances of fraud by someone who obtains lost or stolen information and attempts to execute a transaction are reduced. (French, paragraphs [0023] - [0025]) (emphasis added).

Accordingly, in these paragraphs French discloses a "first level of authentication" that "compares the degree of match between the user-supplied first type of information and known data about the user from other sources" and a "second level of authentication" that is "based on comparatively private information that only the user would know." French does not teach timing of the authentication with respect to completing the transaction, as recited in at least the above-noted distinguishing features of claims 11, 17, and 21. Rather, French teaches that a first authentication is always performed before

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completing the transaction, and that a second level of authentication may be optionally performed based on user information.

At page 11 of the Office Action, the Examiner concedes that French "is silent [regarding] the above condition after completing the transaction."

Rather, the Examiner relies on Foladare to cure the deficiencies of Taro and French and states, which Applicants do not acquiesce to, that "Foladare teaches [a] credit card spending authorization control system, wherein authenticating the user for the transaction after completing the transaction if the price is above a threshold amount." (Office Action, page 11). However, the Examiner does not use Foladare to disclose, nor does Foladare teach or suggest, at least the above noted distinguishing features of claims 11, 17, and 21 directed to "authenticating the user for the transaction before completing the transaction if the price is below a first threshold amount, which corresponds to a first authentication level; and authenticating the user for the transaction after completing the transaction if the price is above a second threshold amount, which corresponds to a second authentication level, wherein the first threshold amount is less than the second threshold amount." Thus, as Foladare cannot be used to cure the deficiencies of Taro and French, the applied references cannot be used to establish a *prima facie* case of obviousness for claims 11, 17, and 21.

Therefore, Applicants respectfully request the Examiner find claims 11, 17, and 21 allowable over the applied references. Dependent claim 31 is similarly patentable over the combination of Taro, French, and Foladare for at least the same reason as claim 11, from which it depends, and further in view of its own respective features. See *In Re Fine*, 837 F.2d 1071 (Fed. Cir. 1988) and M.P.E.P. § 2143.03.

Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejection of claims 11, 17, 21, and 31 under 35 U.S.C. § 103(a).

Claims 18 and 19

Claims 18 and 19 were rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Shuichi in view of Taro, and further in view of French. (Office Action, page 20). Applicants respectfully traverse this rejection for the reasons stated below.

Without acquiescing to the propriety of the rejection, Applicants have amended claim 18 for other reasons and to expedite prosecution. Claim 18 recites features that distinguish over the applied references. For example, claim 18 as amended herein recites, among other features:

wherein the request for information is received before the transaction has completed when *a first one of a plurality of independent authentication levels is used for the transaction if the numeric value is below a first threshold amount* , and

wherein the request for information is received after the transaction has completed when *a second one of the plurality of independent authentication levels is used for the transaction if the numeric value is above a second threshold amount, wherein the first threshold amount is less than the second threshold amount.*

The Examiner states, to which Applicants do not acquiesce, that Shuichi teaches "a receiver operable to receive, from a host computer, a request for information regarding authentication of a user at a service device, wherein the request is in response to a transaction at the service device . . . a storage device operable to store information regarding the authentication of the user . . . a transmitter operable to transmit information regarding the authentication of the user, stored in the storage device, to the host computer in response to receiving the request for information regarding the

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authentication of the user . . . wherein the communications device is a mobile communications device." (Office Action, pages 20-21).

Shuichi generally describes the authenticating a user at a communications terminal. (Shuichi, paragraph [0003]). However, there is no "authentication level" at which the user is authenticated, let alone an "a plurality of independent authentication levels," as recited by claim 18. Moreover, nowhere does Shuichi teach or suggest at least the above-noted distinguishing feature of claim 18 "wherein the request for information is received before the transaction has completed when a first one of a plurality of independent authentication levels is used for the transaction if the numeric value is below a first threshold amount, and wherein the request for information is received after the transaction has completed when a second one of the plurality of independent authentication levels is used for the transaction if the numeric value is above a second threshold amount, wherein the first threshold amount is less than the second threshold amount."

Further, the Examiner acknowledges that "Shuichi does not explicitly teach a request for information regarding authentication of a user at a service device, wherein the request is in response to a transaction at the service device." (Office Action, page 21). Instead, the Examiner relies on Taro to cure the acknowledged deficiencies of Shuichi. However, as discussed above with regards to similar features recited in claims 11, 17, and 21, Taro fails to teach or suggest at least "a first one of a plurality of independent authentication levels is used for the transaction if the numeric value is below a first threshold amount , and wherein the request for information is received after the transaction has completed when a second one of the plurality of independent

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authentication levels is used for the transaction if the numeric value is above a second threshold amount, wherein the first threshold amount is less than the second threshold amount," as recited in claim 18.

The Examiner concedes that the allegedly obvious combination of Schuichi and Taro "do not explicitly teach, (e) wherein the request for information is received before the transaction has completed when a first one of an authentication level is used for the transaction, (f) wherein the request for information is received after the transaction has completed when a second one of an authentication level is used for the transaction." (Office Action, page 22). Instead, the Examiner relies on French to cure the deficiencies of Schuichi as modified by Taro. However, as discussed above with regards to similar distinguishing features recited in claims 11, 17, and 21, French fails to teach or suggest at least "wherein the request for information is received before the transaction has completed when a first one of a plurality of independent authentication levels is used for the transaction if the numeric value is below a first threshold amount , and wherein the request for information is received after the transaction has completed when a second one of the plurality of independent authentication levels is used for the transaction if the numeric value is above a second threshold amount, wherein the first threshold amount is less than the second threshold amount," as recited in claim 18.

For at least the reasons noted above, Applicants submit that independent claim 18 is patentable over Shuichi, Taro, and French, alone or in combination. Dependent claim 19 is similarly patentable over the combination of Shuichi, Taro, and French, for at least the same reason as claim 18, from which it depends, and further in view of its own respective features. Accordingly, Applicants respectfully request that the Examiner

reconsider and withdraw the rejection of claims 18 and 19 under 35 U.S.C. § 103(a). See *In Re Fine*, 837 F.2d 1071 (Fed. Cir. 1988) and M.P.E.P. § 2143.03.

Claims 12, 13, 15, 16, 22-24, 26, and 27

Claims 12 and 22-24

At page 13 of the Office Action, claims 12 and 22-24 were rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Taro in view of French, in further view of Foladare, and still further in view of JP Pub. 2000-92236 to Shuichi ("Shuichi"). Applicants respectfully traverse this rejection.

The Examiner states, to which Applicants do not acquiesce, that Shuichi teaches "a mobile communication device which transmits a user ID to a host communications device to a demand." (Office Action, page 14). However, the Examiner does not use Shuichi to disclose, nor does Shuichi teach or suggest, at least the above noted distinguishing features of claims 11 and 17. Thus, as Shuichi cannot be used to cure the deficiencies of Taro, French, and Foladare, the applied references cannot be used to establish a *prima facie* case of obviousness for claims 11 and 17.

Accordingly, at least based on their respective dependencies to claims 11 and 17, claims 12 and 22-24 are allowable for at least being dependent from an allowable independent claim, in addition to their own respective distinguishing features.

Claims 13, 25, and 26

Claims 13, 25, and 26 were rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Taro in view of French, in further view of Foladare, still further in view of Shuichi, and even further in view of JP Pub. 06-215009 to Shunichi ("Shunichi"). Applicants respectfully traverse this rejection for the reasons stated below.

At page 16 of the Office Action the Examiner states, which Applicants do not concede, that Shunichi teaches "receiving from the service device information regarding current products or services provided." However, the Examiner does not use Shunichi to disclose, nor does Shunichi teach or suggest, at least the above noted distinguishing features of claims 11 and 17. Thus, as Shunichi cannot be used to cure the deficiencies of Taro, French, and Foadare, the applied references cannot be used to establish a *prima facie* case of obviousness for claims 11 and 17.

Accordingly, at least based on their respective dependencies to claims 11 and 17, claims 13, 25, and 26 should be found allowable over the applied references, as well as for their additional distinguishing features.

Claims 15, 16, and 27

Claims 15, 16, and 27 were rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Taro in view of French, further in view of Foadare, and still further in view of Shunichi. Applicants respectfully traverse this rejection for the reasons set forth below.

At page 18 of the Office Action the Examiner asserts, which Applicants do not acquiesce to, that Shunichi teaches "comparing the parameter of the transaction with a parameter o a past transaction provided." However, the Examiner does not use Shunichi to disclose, nor does Shunichi teach or suggest, at least the above noted distinguishing features of claims 11 and 17. Thus, as Shunichi cannot be used to cure the deficiencies of Taro and French, the applied references cannot be used to establish a *prima facie* case of obviousness for claims 11 and 17.

Accordingly, at least based on their respective dependencies to claims 11 and 17, claims 15, 16, and 27 should be found allowable over the applied references, as well as for their additional distinguishing features.

Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the rejections of claims 12, 13, 15, 16, 22-24, 26, and 27 under 35 U.S.C. § 103(a).

Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

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Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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